



PATENT SPECIFICATION 702,965

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COMPLETE SPECIFICATION.

Convertible Chair-Table.

I, HERBERT GEORGE MORSLEY BARNES, 25 Northiam, Woodside Park, London, N.12, of British Nationality, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:

This invention relates to an article of furniture which is adaptable to serve as more than one normal article of furniture and is concerned particularly with an article of furniture which is convertible at will from a chair to a table and vice versa by manipulation of a portion or portions thereof and which is referred to herein as a convertible chair-table.

According to the invention, a convertible chair-table is so constructed that when acting as a table a manipulated portion or portions thereof serving as a table top occupies or occupy substantially the same plane as that in which the seat lies when the convertible chair-table is similarly placed and acting as a chair; furthermore that when acting as either a chair or a table, the manipulated portion, or one, some or all of the manipulated portions may be positively retained in operative position.

The arrangement may be such that when acting as a table or a chair the convertible chair-table has the appearance of a normal table or chair respectively, there being little overt indication that it may serve the alternative purpose, the retention mechanism being hidden from view.

The convertible chair-table may have a hingedly mounted portion serving in one position partly or wholly as a table top and in another position partly or wholly as a chair back.

The convertible chair-table according to the invention may be designed as an article of a suite of furniture, which may also include for example, a secretaire, bureau or similar article to be used in conjunction with the convertible chair-table when positioned as a chair.

[Price 2s. 8d.]

The convertible chair-table may also be designed as an article of occasional furniture.

In one embodiment as depicted in the accompanying drawings Fig. 1 represents in elevation a view of the convertible chair-table adapted for use as a table.

Fig. 2 represents a plan view corresponding to Fig. 1.

Fig. 3 represents in elevation a view of the convertible chair-table in one stage of conversion.

Fig. 4 represents a plan view corresponding to Fig. 3.

Fig. 5 represents in elevation a view of the convertible chair-table adapted for use as a chair.

Fig. 6 represents a plan view corresponding to Fig. 5.

A convertible chair-table comprises a base portion "A" (Fig. 1) constructed in the manner of a stool and having a seat part which may be provided with an upholstered surface and four legs of any design or shape suitable for their purpose.

Hinged intermediately of its ends, to the top edge of one side face of the base portion, is a main flat member "B" (Fig. 2), to the sides of which are in turn hinged auxiliary flat members "C¹" and "C²" (Fig. 2).

When positioned for use as a chair the main flat member is turned slightly past the vertical so as to rest against the corresponding side face of the base portion and form a back support, whilst the auxiliary flat members are pivoted about the main flat member so as to form side struts or supports.

When positioned for use as a table the main flat member is turned so as to bear either on the upper surface of the seat part of the base portion or directly on the base portion itself, so as to form the main portion of a table top, whilst the auxiliary flat members are turned into the same plane as the main flat member to form auxiliary portions of the table top.

To secure the main and auxiliary flat members in position when the convertible

chair-table is in use as a chair two catch units are employed, each comprising a catch plate "D¹" or "D²" (Fig. 3) secured to a respective auxiliary flat member, and a spring loaded catch pawl pivoted on a catch base "E¹" or "E²" (Fig. 4) mounted on the underside of the base portion near one side face thereof.

To release the catch units the catch pawls are pulled back by pulling on a spring loaded trigger member "F" (Fig. 3) pivoted in a housing "G" (Fig. 1) recessed into the underside of the base portion near to and centrally of the front face thereof.

The trigger member is connected to the catch pawl through a linkage comprising a disc crank "H" (Fig. 4) mounted on the underside of a cross member of the base portion and linked to the trigger member and catch pawls by rods "J¹", "J²", "J³" (Fig. 4).

The catch pawls have tails which press against locating pins in the catch plates when the trigger member is pulled and ejects the pins from the locating holes in the catch base; the pins and holes are tapered to give mutual lead in and when engaged co-act to give additional support, via the auxiliary flat members, to the main flat member acting as a chair back.

To secure the main and auxiliary flat members in position when the convertible chair-table is in use as a table, a saw tooth catch "K" (Fig. 3 and 4) is provided which can be turned out from the surface of the main flat member to co-act with a hooked end on the aforesaid trigger member when the main flat member is pressed on to the upper surface of the seat part, the seat upholstery, where employed, yielding sufficiently to allow the trigger end to engage fully in an appropriate tooth of the saw tooth catch, the reaction of the upholstery helping to prevent any play or possible slackness in the connections; when not in use the saw tooth catch is turned so as to be flat in a recessed housing "L" (Fig. 3) in the main flat member. A slotted guide cover plate "M" (Fig. 4) is provided which fits over the top of the housing "G" (Fig. 1), hiding the top end of the trigger member "F" (Fig. 1) while the slot itself guides and controls the saw tooth member "K" (Figs. 3 and 4) into contact with the trigger member "F" (Fig. 3).

To support the auxiliary flat members rigidly in the table position wooden sliders "N" (Fig. 4) are provided beneath the base portion, which can be drawn outwards therefrom to react against the auxiliary flat members, when the main flat member is in the table position. Small pads of rubber, felt, or the like may be provided on the sliders or auxiliary flat members at the points of contact, if so desired.

The sliders are drawn outwards into the position shown in Fig. 1 by pulling on the heads of wood screws screwed into their exterior ends; as of necessity the screws project slightly there are recesses (not shown) in the underside of the auxiliary flat members made to receive them in suitable positions. At the bottom of the recesses are small pads of rubber, or the like, which exert sufficient pressure reaction to prevent any slight movement of the sliders or the auxiliary flat members when the convertible chair-table is in the chair position.

The sliders are located and retained in the drawn out position of Fig. 1 by cut-outs "Q" (not visible in Fig. 1 but shown in Fig. 5) at their interior ends which engage with an appropriate part or parts of the base portion when the sliders are in the said drawn out position of Fig. 1. Stops "O" (Fig. 4) attached one to each slider assist in registering the sliders both in their Fig. 4 and Fig. 5 positions and also prevent entire withdrawal of the sliders.

The sliders work in slots through the sides of the base portion and through a slider guide "P" (Fig. 5) fastened to the underside of the base portion.

During conversion from the chair to the table position, it is necessary to hold the auxiliary flat members in the plane of the main flat member so as to prevent them from folding under their own weight. To this end two retaining catches or bolts "R" (Fig. 3) are provided on the auxiliary flat members beneath the plane of the underside of the base portion, which can each be projected to co-act with a respective small bearing plate "S" (Fig. 3) on the main flat member.

To retain the main flat member temporarily in the chair position when the catch pawls are released and the auxiliary flat members swing outwards under their own weight after ejection of the locating pins from their holes a ball catch (not shown) is provided between the main flat member and the underside of the base portion.

The invention permits and makes possible the use of very many alternative shapes or designs of table top—and in consequence chair back and side members or struts—such as oval, kidney, rectangular or square with rounded corners and the like, and if desired all or some of the main and auxiliary flat members can be upholstered completely or locally on those faces which are underneath in the table position, thus giving upholstered chair back and/or side members or struts without increasing the slight overt indication of alternative purpose.

What I claim is:—

1. A convertible chair-table so constructed that when acting as a table, a manipulated portion or portions thereof

5 serving as a table top occupies or occupy substantially the same plane as that in which the seat lies when the convertible chair-table is similarly placed and acting as a chair.

2. A convertible chair-table as claimed in Claim 1 and further so constructed that when acting as either a chair or a table the manipulated portion, or one, some or all of the manipulated portions is or are positively retained in operative position.

3. A convertible chair-table as in Claim 2, in which the positive retention remains effective however the convertible chair-table is orientated in space or moved.

4. A convertible chair-table as in Claim 1, having side members acting—when the convertible chair-table is in the chair position—to strut a main member at that time acting as the chair back.

5. A convertible chair-table as in Claim 4, in which the side members are flat members which together with the main flat member forms the table top when the convertible chair-table is in the table position.

6. A convertible chair-table as in Claim 4 or Claim 5 in which the side members act as chair wing members when the convertible chair-table is in the chair position.

7. A convertible chair-table as in Claim 2, in which operation of a single member effects release from positive retention of the portion or portions of the convertible chair-table in both the chair and table positions.

8. A convertible chair-table as in Claim 2, having means operative, when the convertible chair-table is released from positive retention in one position, to retain one or more of the said portions from uncontrolled movement as the portion or portions forming the table top are moved into the alternative position.

9. A convertible chair-table as in Claim 2, or Claim 8, in which substantially all the means of retention are hidden from view.

10. A convertible chair-table as described and as shown in the accompanying drawings.

HERBERT G. M. BARNES.

PROVISIONAL SPECIFICATION.

Improvements in and relating to Articles of Furniture.

I, HERBERT GEORGE MOSELEY BARNES, of 25 Northiam, Woodside Park, London, N.12, a British Subject, do hereby declare this invention to be described in the following statement:—

This invention relates to an article of furniture which is adaptable to serve as more than one normal article of furniture, and is concerned particularly with an article of furniture which is convertible at will from a chair to a table and vice versa by manipulation of a portion or portions thereof and which is referred to herein as a convertible chair-table.

According to the invention, a convertible chair-table is so constructed that when acting as either a chair or a table the manipulated portion, or one, some, or all of the manipulated portions is or are securely locked in operative position. The arrangement may be such that when acting as a table or a chair the convertible chair-table has the appearance of a normal table or chair respectively, there being little overt indication that it may serve the alternative purpose, the locking mechanism being hidden from view.

The convertible chair-table may have a hingedly mounted portion serving in one position partly or wholly as a table top and in another position partly or wholly as a chair back.

The convertible chair-table according to

the invention may be designed as an article of a suite of furniture, which may also include for example, a secretaire, bureau or similar article to be used in conjunction with the convertible chair-table when positioned as a chair.

In one embodiment a convertible chair-table comprises a base portion constructed in the manner of a stool and having a seat part which may be provided with an upholstered surface and four legs of any design or shape.

Hinged intermediately of its ends, to the top edge of one side face of the base portion, is a main flat member; to the sides of which are in turn hinged auxiliary flat members.

When positioned for use as a chair the main flat member is turned slightly past the vertical so as to rest against the corresponding side face of the base portion and form a back support, whilst the auxiliary flat members are pivoted about the main flat member so as to form side supports.

When positioned for use as a table the main flat member is turned so as to bear either on the upper surface of the seat part of the base portion or directly on the base portion itself, so as to form the main position of a table top, whilst the auxiliary flat members are turned into the same plane as the main flat member to form auxiliary portions of the table top.

To secure the main and auxiliary flat mem-

bers in position when the convertible chair-table is in use as a chair two catch units are employed, each comprising a catch plate secured to a respective auxiliary flat member and a spring loaded catch pawl pivoted in a catch base mounted on the underside of the base portion near one side face thereof. To release the catch units the catch pawls are pulled back by pressing a spring loaded trigger member pivoted in a housing recessed into the underside of the base portion near to and centrally of the front face thereof.

The trigger member is connected to the catch pawl through a linkage comprising a disc crank mounted on the underside of the base portion and linked to the trigger member and catch pawls by rods. The catch pawls have tails which press against locating pins in the catch plates when the trigger member is pressed and ejects the pins from locating holes in the catch base; the pins and holes are tapered to give a mutual lead in and when engaged co-act to give additional support, via the auxiliary flat members, to the main flat member acting as a chair back.

To secure the main and auxiliary flat members in position when the convertible chair-table is in use as a table, a saw-tooth catch is provided which can be turned out from the surface of the main flat member to co-act with a hooked end on the aforesaid trigger member when the main flat member is pressed on to the upper surface of the seat part, the seat upholstery, where employed, yielding sufficiently to allow the trigger end to engage fully in an appropriate tooth of the saw-tooth catch, the reaction of the upholstery helping to prevent any play or possible slackness in the connections; when not in use the saw-tooth catch is turned so as to be flat in a recessed housing in the main flat member.

To support the auxiliary flat members rigidly in the table position, wooden sliders are provided beneath the base portion which can be drawn outwards therefrom to react

against the auxiliary flat members, when the main flat member is in the table position. Small pads of rubber, felt, or the like may be provided on the sliders or auxiliary flat members at the points of contact. The sliders are located in the drawn out position by cut-outs therein which register with an appropriate part or parts of the base portion, and have stops attached which prevent their entire withdrawal. The sliders work in slots through the sides of the base portion and through a slider guide fastened to the underside of the base portion.

During conversion from the chair to the table position, it is necessary to hold the auxiliary flat members in the plane of the main flat member so as to prevent them from folding under their own weight. To this end two catches or bolts are provided on the auxiliary flat members beneath the plane of the underside of the base portion, which can be projected to co-act with a small bearing plate on the main flat member.

To retain the main flat member temporarily in the chair position when the catch pawls are released and the auxiliary flat members swing outwards under their own weight after ejection of the locating pins from their holes, a ball catch is provided between the main flat member and the underside of the base portion.

The invention permits and makes possible the use of very many alternative shapes or designs of table top, and in consequence, chair back and side supports such as oval, kidney, rectangular or square with rounded corners and the like, and if desired all or some of the main and auxiliary flat members can be upholstered completely or locally on those faces which are underneath in the table position, thus giving upholstered chair back and/or side supports without destroying the slight overt indication of alternative purpose.

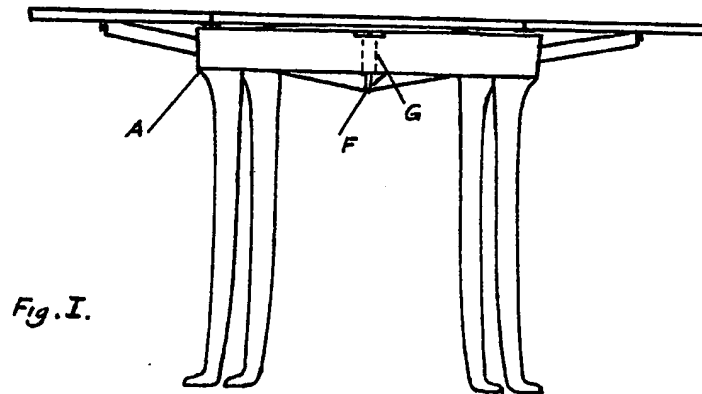
HERBERT GEORGE MORSLEY
BARNES.

702,965
3 SHEETS

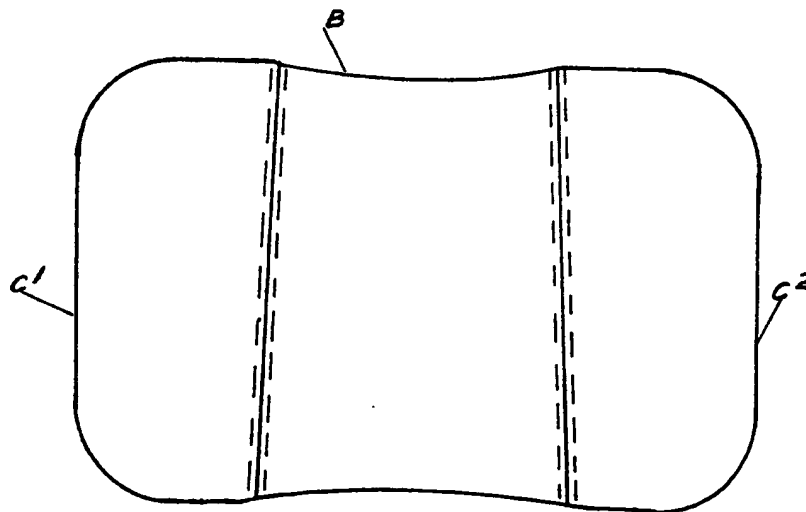
COMPLETE SPECIFICATION

This drawing is a reproduction of
the Original on a reduced scale.

SHEET 1



ELEVATION.



PLAN.

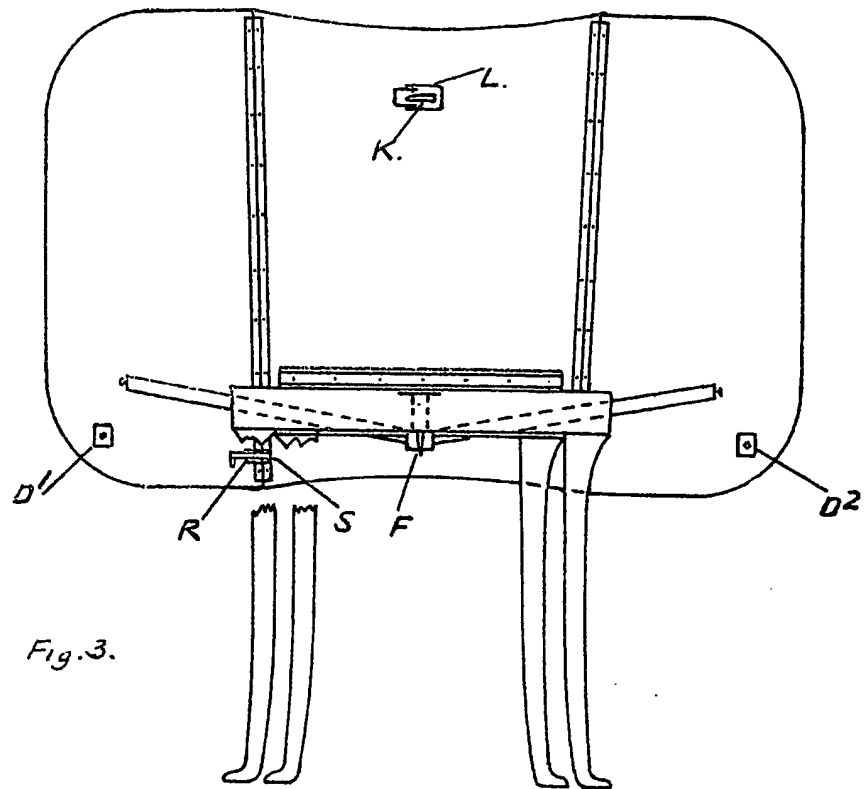


Fig. 3.

ELEVATION
SEAT REMOVED.

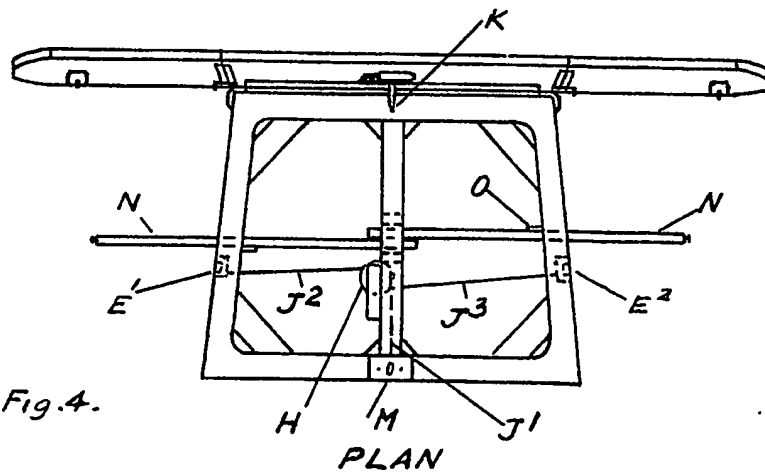


Fig. 4.

PLAN

702,965 COMPLETE SPECIFICATION

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SHEETS 2 & 3

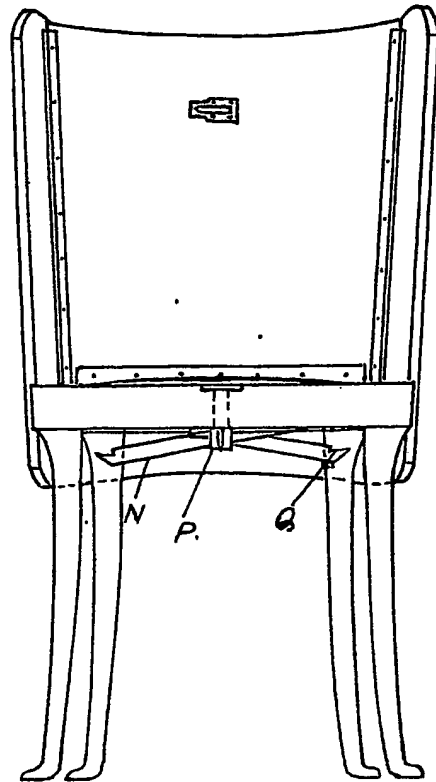


Fig. 5.

ELEVATION.

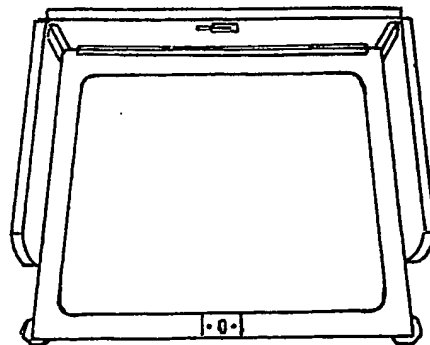


Fig. 6.

PLAN.

702,965 COMPLETE SPECIFICATION
3 SHEETS
This drawing is a reproduction of
the Original on a reduced scale.
SHEETS 2 & 3

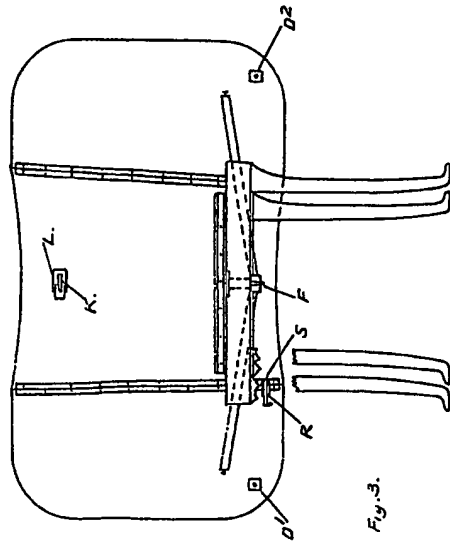


Fig. 3.

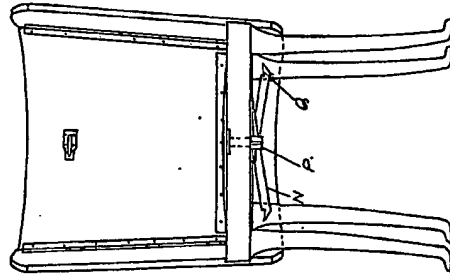


Fig. 5.

ELEVATION
SEAT REMOVED.

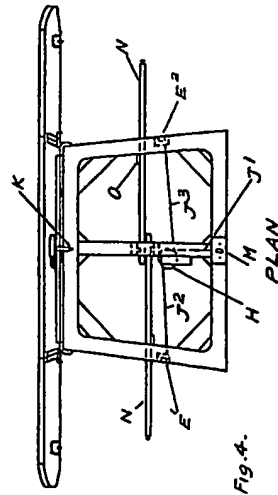


Fig. 4.

ELEVATION.

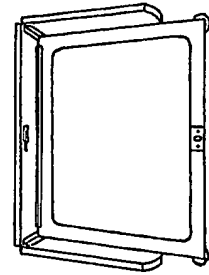


Fig. 6.

PLAN.